



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

June 21, 2004

Certified Mail No. 7099 3220 0009 1975 4670

Mr. Gary Bremer, President
NW Design Molders, Inc.
280 Rose Street
Jerome, Idaho 83338

RE: Facility ID No. 053-00005, NW Design Molders Inc., Jerome
Final Tier II Operating Permit and Permit to Construct Modification

Dear Mr. Bremer:

The Department of Environmental Quality (DEQ) is issuing modified Tier II Operating Permit and Permit to Construct No. T2-030407 for NW Design Molders, Inc., located in Jerome, in accordance with the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400-461 and 58.01.01.200-228, respectively. This permit has been modified by DEQ as requested in your March 25, 2003 submittal and on comments received during the public comment period. The permit is effective immediately.

Stephen VanZandt of the Twin Falls Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. In addition to your facility's plant manager, DEQ recommends the following representatives attend the meeting: your responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with the permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

If you have any questions about the enclosed permit or the permitting process, please contact Bill Rogers at (208) 373-0502 or wrogers@deq.state.id.us.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/HE/sd

Permit No. T2-030407

Enclosures



**Air Quality
TIER II OPERATING PERMIT
And
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT NO.: T2-030407

AIRS FACILITY NO.: 053-00005

AQCR: 63

CLASS: SM

SIC: 3086

ZONE: 11

UTM COORDINATE (km): 703.6, 4730.9

1. PERMITTEE

NW Design Molders, Inc.

2. PROJECT

Tier II Operating Permit and Permit to Construct Modification

3. MAILING ADDRESS

280 Rose Street

CITY

Jerome

STATE

ID

ZIP

83338

4. FACILITY CONTACT

Gary Bremer

TITLE

President

TELEPHONE

(208) 777-8485

5. RESPONSIBLE OFFICIAL

Gary Bremer

TITLE

President

TELEPHONE

(208) 777-8485

6. EXACT PLANT LOCATION

280 Rose Street, Jerome, Idaho

COUNTY

Jerome

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Expanded plastic foam products

8. PERMIT AUTHORITY

This permit to construct and Tier II operating permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200-228 and IDAPA 58.01.01.400-470, respectively. This permit pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

Only the terms and conditions pertaining to Tier II operating permit requirements are subject to the expiration date of this permit.

The permit to construct conditions in this permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho*.


C. STEPHEN ALLRED, DIRECTOR,
DEPARTMENT OF ENVIRONMENTAL QUALITY

Jon Sandoral
Chief of Staff

DATE ISSUED: June 21, 2004

DATE EXPIRES: September 22, 2005

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Acronyms, Units, and Chemical Nomenclature

AIRS	Aerometric Information Retrieval System
ASTM	American Standards for Testing and Measurement
AQCR	Air Quality Control Region
CO	carbon monoxide
DEQ	Department of Environmental Quality
Dscf	dry standard cubic feet (foot)
EPA	U.S. Environmental Protection Agency
EPS	expandable polystyrene
Gr	Grain
gr/dscf	grains per dry standard cubic foot
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
Km	Kilometer
lb/hr	pounds per hour
lb/day	pounds per day
MMBtu/hr	million British thermal units per hour
NO _x	nitrogen oxides
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SM	synthetic minor
T/yr	tons per any consecutive 12-month period
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT No.: T2-030407

Permittee:	NW Design Molders, Inc.	Facility ID No. 053-00005	Date Issued:	June 21, 2004
Location:	Jerome, Idaho		Date Expires:	September 22, 2005

1. PERMIT SCOPE

Purpose

The purpose of this permit is to limit facility emissions below Tier I operating permit thresholds. In addition, this permit does the following:

- 1.1 This Tier II operating permit includes a new permit to construct for the installation of a pre-expander which increases the EPS throughput limit and the VOC emissions rate limit.
- 1.2 This permit supersedes Tier II Permit No. 053-00005, issued September 22, 2000.

9903-172-2

Regulated Sources

- 1.3 Table 1.1 lists all sources of emissions regulated in this permit.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	<u>Boiler</u> Manufacturer: Superior Model: 6-750 Rated heat capacity: 6.3 MMBtu/hr Fuel: Natural gas	None
3	<u>Pre-expander</u> Manufacturer: AMD Model: AMD Type P1500/0 Capacity: 1,200 pounds of EPS bead per hour <u>Pre-expander</u> Manufacturer: Kurtz Model: 1609/90 Capacity: 100 pounds of EPS bead per hour <u>Pre-expander</u> Manufacturer: NWB Model: Not available Capacity: 600 pounds of EPS bead per hour	None
3	<u>Prepuff aging storage area</u> Manufacturer: Advance Specialties	None
3	<u>Molding</u> Manufacturer: TRI Model: 2001	None
3	<u>Press</u> Manufacturer: Springfield Model: H30	None
3	<u>Press</u> Manufacturer: FMI Model: 130	None
3	<u>Post molding aging (the first 24 hours)</u> Manufacturer: Not available	None
3	<u>Product Storage (the second 24 hours)</u> Manufacturer: Not available	None

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2. FACILITY-WIDE CONDITIONS***Fugitive Emissions***

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable upon receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
- 2.4 The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.
- 2.5 Fugitive emissions shall not be observed leaving the property for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by an alternative method approved by DEQ.

Odors

- 2.6 No person shall allow, suffer, cause, or permit the emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
- 2.7 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Visible Emissions

- 2.8 No person shall discharge any air pollutant to the atmosphere from any point of emissions for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emissions to comply with the requirements of this section.

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- 2.9 The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emissions, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each quarterly visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Excess Emissions

- 2.10 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets, and breakdowns.

Fuel-Burning Equipment

- 2.11 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, in accordance with IDAPA 58.01.01. 675.

- The Superior boiler shall burn natural gas exclusively.

Reports and Certifications

- 2.12 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Twin Falls Regional Office
601 Pole Line Road., Suite 2
Twin Falls, ID 83301
Phone (208) 736-2190
Fax (208) 736-2194

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Monitoring and Record Keeping

- 2.13 The permittee shall maintain sufficient record keeping to assure compliance with the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

Open Burning

- 2.14 The permittee shall comply with the provisions of IDAPA 58.01.01.600-616, *Rules for the Control of Open Burning*.

Air Stagnation Advisory Days

- 2.15 The permittee shall comply with IDAPA 58.01.01.550-562, *Air Pollution Emergency Rule*.

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3. PRE-EXPANDERS (AMD TYPE P 1500/0, KURTZ, AND NWB), PREPUFF AGING STORAGE AREA, MOLDING, PRESSES, POST MOLDING AGING (THE FIRST 24 HOURS), AND PRODUCT STORAGE (THE SECOND 24 HOURS)**3.1 Process Description**

The EPS raw material (beads) arrives at the facility in 1,000-pound boxes. The beads are analyzed for pentane to ensure they meet required specifications. The beads are stored at the facility until they are needed for expansion. The beads are transferred into a hopper and fed to the pre-expanders by an auger. The beads are partially expanded to their desired density using steam from a natural gas-fired boiler to heat the beads to release pentane, which is the encapsulated blowing agent contained in the beads. The expanded beads are then aged in prepuff storage for 6 to 48 hours to allow the prepuff to stabilize. After aging, the material is transferred either to shape molding presses or to block molding. The EPS is put into a mold. Steam is added, and a fusion process occurs that bonds the EPS beads together. The fused EPS beads are then stored for curing. The forms are then cut to the final shape and stored. Each step of the process results in pentane emissions.

3.2 Control Description

There are no emissions controls for these processes.

Emissions Limits**3.3 Emissions Limits**

- The combined VOC emissions from the pre-expanders, the prepuff aging storage area, molding, presses, the post molding aging (the first 24 hours), and product storage (the second 24 hours) shall not exceed 1,783 lb/day.
- The combined VOC emissions from the pre-expanders, the prepuff aging storage area, molding, presses, the post molding aging (the first 24 hours), and product storage (the second 24 hours) shall not exceed 74.3 tons per any consecutive 12-month period (T/yr).

Operating Requirements**3.4 EPS Beads Throughput Limits**

- The maximum EPS beads throughput to the pre-expanders shall not exceed 28,800 lb/day.
- The maximum EPS beads throughput to the pre-expanders shall not exceed 1,248 tons per any consecutive 12-month period (T/yr).

3.5 Pentane Limit

The permittee shall not expand EPS beads that contain pentane greater than 7% by weight.

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Monitoring and Recordkeeping Requirements**3.6 Monitor Operating Parameters**

The permittee shall monitor and record the following information. These records shall remain onsite for the most recent five year period and shall be made available to DEQ representatives upon request.

- The throughput of EPS beads in pounds per day.
- The throughput of EPS beads for the previous consecutive 12-month period.
- For each purchase of EPS beads, documentation clearly indicating the percent pentane by weight of the beads.

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4. SUMMARY OF EMISSIONS RATE LIMITS

Table 4.1 provides a summary of all emissions rate limits required by this permit

Table 4.1 SUMMARY OF ALL EMISSIONS RATE LIMITS

NW Design Molders Inc., Jerome Emissions Limits^a – daily (lb/day) and annual (T/yr)^b		
Source Description	VOC	
	lb/day	T/yr
Pre-expanders, prepuff storage area, molding, presses, post molding aging (the first 24 hrs), and product storage (the second 24 hrs)	1,783	74.3

^a As determined by a pollutant-specific EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

^b As determined by actual annual production rates.

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5. GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. In the event of any change in control or ownership of source(s) covered by this permit, the permittee and succeeding owner or controller shall notify DEQ of the change in ownership. Any proposed change(s) or modification(s) to this permit by the succeeding owner or controller shall be requested in accordance with the *Rules for the Control of Air Pollution in Idaho*.
6. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
7. The Director may require the permittee to develop a list of operation and maintenance procedures to be submitted to DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
8. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.